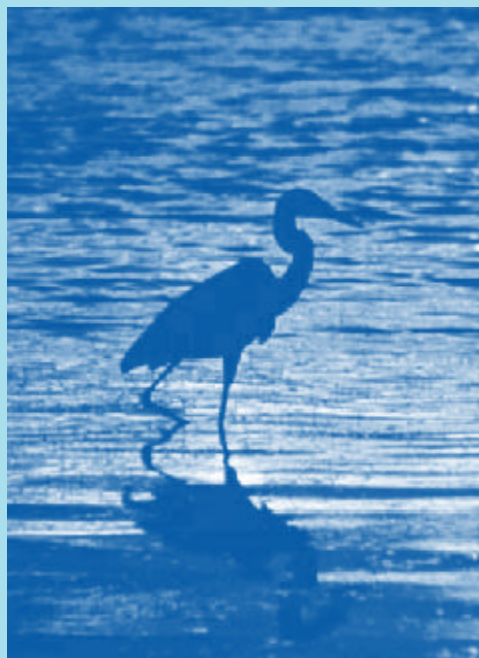


NPDES PERMIT COMPLIANCE AND ENFORCEMENT

A RESOURCE GUIDE FOR OIL AND GAS OPERATORS



**The NPDES Education/Communication/
Training Workgroup**

December 1998

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THE NPDES EDUCATION/COMMUNICATION/TRAINING WORKGROUP
An Ad Hoc Government/Industry Committee

September, 1998

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Acting Assistant Secretary
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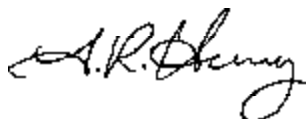
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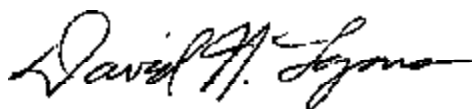
On behalf of the NPDES Education/Communication/Training Workgroup (ECT Workgroup), we are pleased to transmit our final report, *NPDES Permit Compliance and Enforcement—A Resource Guide for Oil and Gas Operators*. Since January 1997, the ECT Workgroup has been developing ideas to improve communication between NPDES regulators and the oil and gas exploration and production industry regarding NPDES permit compliance issues. This report represents the Workgroup's two-year effort, which we accomplished exclusively by using teleconference meetings, e-mail, voice mail, and fax. This electronic communication method was necessary because of the geographical separation of Workgroup members.

The NPDES ECT Workgroup idea grew out of meetings held during the fall of 1996, sponsored by the Interstate Oil and Gas Compact Commission (IOGCC) and the U.S. Department of Energy's Office of Fossil Energy. Workgroup members were selected from across the U.S. to represent state, federal, and industry interests, with co-leaders from the Environmental Protection Agency (EPA) and the oil and gas industry. We believe our efforts to develop methods and mechanisms for improving education and communication are a successful start, and hope the suggestions presented in this report, including development of an industry-sponsored NPDES website, are carried through by future industry and government groups. The Workgroup expresses appreciation to all who have been supportive of our efforts, and we welcome your comments on this report.

Respectfully submitted,



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**Prepared by:
The NPDES Education/Communication/
Training Workgroup**

**Organized by:
Office of Fossil Energy
U.S. Department of Energy**

**In Cooperation with:
Office of Enforcement and Compliance Assurance
U.S. Environmental Protection Agency**

December 1998

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EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

Introduction

THE NPDES EDUCATION/COMMUNICATION/TRAINING WORKGROUP



During the fall of 1996, the Interstate Oil and Gas Compact Commission sponsored sessions for government and industry representatives to discuss concerns about the National Pollution Discharge Elimination System (NPDES) program under the Clean Water Act. At a December 1996 workshop in Las Vegas, Nevada, industry, state and federal representatives developed a list of issues, and grouped them into six categories: statutory, regulatory, permitting, education/communication, regional, and resources. Workshop participants decided that, although all these issues were important, they should focus on two areas where progress was possible — permitting and education/communication.

In January 1997, the NPDES Education/Communication/Training Workgroup (ECT Workgroup) was established with co-leaders from the Environmental Protection Agency (EPA) and industry. Workgroup members were selected from across the U.S. to represent state, federal, and industry interests. The ECT Workgroup conducted all its business through conference calls, e-mail and fax. Although challenging, this electronic communication method was the only practical, cost-effective solution to accomplishing Workgroup goals, due to geographical separation of the members.

Purpose and Action

The ECT Workgroup's purpose was to develop ideas that would improve communication between NPDES regulators and the oil and gas industry regarding NPDES compliance issues. Both industry and regulatory members expressed frustration about the lack of common understanding of NPDES permitting, compliance monitoring, and enforcement processes, and about the need for better educational and training resources to improve performance. Therefore, ECT Workgroup members decided to compile an inventory of NPDES education and communication tools currently available, and to develop a strategy for fostering understanding.

The Workgroup focused on several areas, including permit compliance monitoring and reporting, enforcement activity and options, and treatment technology. Initially, discussions centered around opportunities to enhance operating companies' knowledge about permit compliance and enforcement policies and procedures. The Workgroup determined that these could include: compliance audits to which operators are invited, enforcement workshops, compliance management tools, and an Internet web site linked to EPA sites that include information about NPDES compliance and enforcement.

The ECT Workgroup also discussed the need for materials and information to help NPDES regulatory agency personnel understand more about oil and gas industry exploration and extraction operations and treatment processes. Through ongoing discussions, the ECT Workgroup developed a communication strategy and several ideas for joint industry/government education and training projects. This report represents a compendium of the ECT Workgroup's efforts.

Summary of Report

The report begins with the ECT Workgroup Strategy, a summary of the Workgroup's purpose, vision, and deliverables. The strategy emphasizes dissemination of NPDES requirements and compliance information to the oil and gas industry, especially independent operators. NPDES issues include pre-permit activities, permit compliance monitoring and reporting, small operator compliance awareness, and treatment technology. Deliverables include a list of existing NPDES training resources, a plan to develop additional resources, an industry website, and an NPDES training video for industry and government use.

The main section of the report contains several Action Plans, which provide information about each deliverable listed in the strategy document. These plans summarize projects that will either be completed by ECT Workgroup members, or will be referred to other government or industry groups as worthwhile joint educational and training projects to be developed in the future. The plans include the following:

- Oil and Gas E&P Sector Notebook - Published by EPA, this is one in a series of notebooks designed to improve industry managers' understanding of regulatory requirements and compliance methods, and to improve government inspectors' understanding of industry.
- NPDES Information Website - An oil and gas industry homepage will allow users to access specific areas of NPDES information within the EPA Internet system.

- NPDES Compliance Management Tools (CMTs) - There are a large number of CMTs, developed by government and industry, currently used to achieve compliance with NPDES permit provisions. This plan focuses on identifying, developing and cataloging these CMTs, so that they may be more easily used by permittees.
- NPDES Enforcement Workshop - A workshop tailored for industry personnel was held in September, 1998. EPA provided instructors and used existing NPDES inspection and enforcement training materials. Future workshops on NPDES permit compliance and enforcement issues may be planned.
- NPDES Mock Inspection - EPA uses mock inspections for compliance assistance, to provide companies with information about how NPDES inspectors determine permit compliance. Mock inspections are executed by an NPDES inspector, but sponsored by industry.
- Industry NPDES Compliance Metric - This is a measure of NPDES compliance performance among offshore oil and gas operators. Industry will develop this metric by using the Minerals Management Service (MMS) *Performance Measures for Safety and Environmental Management Systems at OCS Exploration and Production Operations*. MMS will work with industry, including the Offshore Operators Committee, on developing this metric.

Finally, the report contains several Appendices of useful information:

- A list of ECT Workgroup members and contact information
- NPDES permit process
- A table of NPDES educational, training and communication information
- A list of oil and gas industry Internet websites.

The ECT Workgroup offers this report as an example of a useful joint industry/government effort. The Workgroup hopes that these resources will be a start towards better communication between the oil and gas industry and government in the area of NPDES permitting and compliance.

**NPDES EDUCATION/
COMMUNICATION/TRAINING
(ECT) WORKGROUP STRATEGY:
OIL AND GAS SECTOR**

NPDES ECT WORKGROUP STRATEGY: OIL AND GAS SECTOR

Purpose (What we are doing)

The NPDES Education/Communication/Training Workgroup has identified issues and/or developed tools and procedures to provide a better link between NPDES regulators and the oil and gas industry in understanding objectives and methods of water discharge permit compliance, as follows:

- Pre-permit activities (*e.g.*, waste stream identification, permit applications, sampling, agency interaction, and policies)
- Permit compliance monitoring and reporting (*e.g.*, operator training, sampling, documentation, discharge monitoring reports, and policies)
- Small operator compliance awareness
- Enforcement activity and options (*e.g.*, permit modifications, variances, penalty options, and compliance orders)
- Training and awareness of oil and gas activities for regulators and the public
- Treatment technology familiarization (*e.g.*, E&P overview, waste treatment technologies, operational practices and environments)
- Cross-regional issues and differences between EPA regional permits

Vision (What we want to see)

Our efforts will result in improved understanding between NPDES regulators and the oil and gas industry, including an appreciation for each other's purposes and challenges. Overall permit compliance will improve when regulators better understand producing and treatment methods and obstacles, and the oil & gas industry better understands the objectives, methods, and options for compliance. Improvements should result in more effective inspections and lower incidents of non-compliance.

Strategy (How we will do it)

We will provide opportunities for engagement between NPDES regulators and the oil & gas industry to improve understanding of each other's business and tools and procedures, and to facilitate communication, awareness, and training. NPDES ECT Workgroup deliverables include:

1. NPDES Process Flow Diagram tied to training resources and needs
2. List of training resources available and ideas to develop needed resources
3. Action plans for developing:
 - a. EPA Sector Notebook for E&P
 - b. Compliance management tools
 - c. Enforcement workshop(s)
 - d. Mock inspections
 - e. Industry compliance metrics
 - f. Website

**Measures (How we will know we have succeeded)**

Our purpose will be accomplished by developing the deliverables contained in this Strategy document.

ACTION PLANS

ACTION PLAN 1:

OIL AND GAS EXPLORATION AND PRODUCTION SECTOR NOTEBOOK

What is it?

The EPA industry sector notebooks, currently completed for eighteen industries, were originally designed as a resource for EPA staff. These notebooks provide information on environmental issues for specific industrial sectors, and have become so useful and popular that now they are also used by industry business managers. The sector notebooks help managers better understand regulatory requirements, and learn more about how various companies in their industry have undertaken regulatory compliance. The notebooks also contain information about innovative pollution prevention methods developed by specific companies.

The audience for this document is the regulated community, states, federal agencies, local governments, and the public.

There is a boiler-plate outline for these documents. The major headings in each sector notebook are:



- a. Introduction to the Sector notebook project
- b. Introduction to the industry
- c. Industrial process description
- d. Chemical release and transfer profile
- e. Pollution prevention opportunities
- f. Summary of applicable federal statutes and regulations
- g. Compliance and enforcement history
- h. Compliance assurance activities
- i. Contacts

Schedule

The Sector Notebook for the Oil and Gas Exploration and Production industry is currently one-third complete. EPA plans completion of this sector notebook in Spring 1999.

Availability

The sector notebooks may be purchased from the Superintendent of Documents, U.S. Government Printing Office. Requests should be directed to:

Superintendent of Documents
U.S. Government Printing Office
Washington, DC 20402
Phone: (202) 512-1800
Fax: (202) 512-2250
8:00 a.m. to 4:30 p.m., Monday through Friday

Electronic versions of all sector notebooks are available on the EPA **EnviroSense** Bulletin Board and via the Internet on the **EnviroSense** website (at <http://www.epa.gov/envirosense/> or <http://www.es.epa.gov>).

ACTION PLAN 2:

INTERNET COMMUNICATION — OIL AND GAS EXTRACTION-RELATED NPDES INFORMATION

What is it?

A **website** will be created to allow users to access specific sites, or areas of information within Earth1, the EPA Internet system. Users will start at an industry home page and access specific sites via hyperlinks. Initially, the industry home page (ECT home page) will contain between ten and fifteen links to sites within the Earth1 system.

Once a user contacts the Earth1 system, links appear to all other sites in the system. Earth1 comprises several homepages, such as the Office of Water homepage, that contain information about specialized topics, including information on EPA offices and regions. Although these homepages are subordinate to Earth1, they also stand alone. Each of these other home pages has an option for users to either return to the beginning or to Earth1. Hypertext links to various subjects are also provided.

The NPDES website will be designed to take users to a specific location within Earth1, or another home page within the Earth1 system. Menus will help users to access other information locations within Earth1. Each user will decide how best to return to the ECT homepage. One option would be making the ECT home page the browser homepage; then each user would click on “Home” to return to the ECT homepage. Another option would be to bookmark the ECT home page for convenient access to return to the ECT home page.

How is it developed?

An advisory committee will be formed to develop the ECT home page. EPA personnel will work with industry representatives to decide the best Earth1 sites with which to link. The group will continue to meet in the future, possibly once every year or two, to determine the continued efficacy of existing sites and the possibility of adding more.

How is it communicated?

Industry will be responsible for advertising the ECT home page and distributing the html address.

Who will do it?

Industry will maintain and update the ECT home page. Assistance will be provided by EPA, MMS, and the ECT home page advisory committee.

ACTION PLAN 3:

NPDES COMPLIANCE MANAGEMENT TOOLS (CMTs)

What is it?

Compliance management tools (CMTs) are tools a permittee uses to achieve compliance with the prohibitions, limitations, and monitoring provisions of any NPDES permit. There are many CMTs used by the exploration and production industry (See Figure 1). These tools were developed by both government and industry. Although the list appears long, not all of these tools are appropriate for every situation. Operators must assess the unique compliance status of each facility and select the most appropriate tools. The CMTs listed here are not an exhaustive list, but rather are a starting point for selecting or developing new tools as a need arises.

How is it developed?

The first step in selecting or developing CMTs is to perform a compliance status assessment. This may be done for a facility, business, company or industry. The assessment should include a review of past violations to identify any weak areas in the compliance effort. The next step is to prepare a compliance management plan. The management plan should respond to the assessment results. Additionally, existing work processes, data needs, reporting and adjustment mechanisms should be taken into account.

Management plan development should include a review of CMTs currently being applied, and should point to any new CMTs needed. Individual preferences, size of the activity, and knowledge of past efforts will assist in identifying CMTs with the highest potential for success. The quality of the implementation effort and the correct application of a CMT will be critical to final compliance success or failure. Finally, strong, visible management support is always a critical factor.

How is it communicated?

An effort to identify, develop, catalogue, or communicate information about CMT's should focus on the following areas:

1. Intended application for each tool
2. Display a model of, an example of, or the actual CMT
3. Source for obtaining the CMT
4. Identification of any compliance gaps where tools do not exist.

Once developed, CMT information could be communicated several ways. An agency might issue booklets, pamphlets or brochures containing CMT information to both industry and regulators. These could be made available through an agency web site, a toll-free order number, or mass mailings. An industry effort might contain similar communication mechanisms. Industry could also communicate this information through workshops and conferences. Figure 2 contains a listing of some possible communication tools.

Who will do it?

Industry associations, including the American Petroleum Institute (API), the Offshore Operators Committee (OOC), Western States Petroleum Association (WSPA), and the Society of Petroleum Engineers (SPE), could take the initiative to communicate CMT information to their members. In addition, they could make these information sources known to the entire regulated community so that non-industry association members could also benefit.

Next steps

The communication plan for developing CMTs should be made available to industry associations for their consideration. Industry associations pursuing the development of CMT materials should communicate results to the EPA in order to provide wide distribution of information.

COMPLIANCE MANAGEMENT TOOLS (CMTs)

- Calendars
- Checklists
- Citation or Notice of Violation (NOV)
- Company Policy
- Data Gathering, e.g., incident management system
- Discharge Monitoring Reports (DMRs)
- EPA Enforcement Personnel (Q&A, FAQs)
- EPA Permit Writer (Q&A, FAQs)
- EPA's Penalty Assessment Policy
- Fines
- Individual Performance Reviews (Periodic)
- Laboratories
- Management Commitment & Reinforcement
- Management Plan, Compliance Elements
- Metrics
- Monitoring Forms
- Noncompliance Report/Investigation
- NPDES Compliance Manual
- NPDES Effluent Guidelines and Limitations (EGL)
Development Document
- Penalty Assessment Models (e.g., Excel Spreadsheet Model)
- Periodic Company Reviews/Audits
- Permit
- Permit Compliance Manual
- Placards
- Posters
- Rapid on-site monitoring methods that are not
EPA approved methods but correlate to the approved method
- Recognition
- Regular Agency Enforcement Reviews
- Root Cause Analysis (RCA) on Noncompliances
- Technology (e.g., treating technology, monitoring
technology, training technology)
- Training
- Vendors
- Website (applications for Intranet and Internet websites for
compliance)
- Work Process or Procedure (e.g., maintenance)

COMMUNICATION TOOLS

- Audio Tape
- Brochures
- CD-I (Computer based interactive training)
- Conferences
- E-mail
- Hard Copy Mailings
- Industry Cooperative Workgroups
- Telephone
- Video Conferencing
- Video Tape
- Web
- Workbooks (self-paced learning)
- Workgroup Meetings
- Workshops

ACTION PLAN 4:

NPDES ENFORCEMENT WORKSHOP

What is it?

A one-day workshop, primarily for oil and gas exploration and production industry personnel, on NPDES permit compliance and enforcement issues. EPA used existing educational materials to develop the workshop, which was co-sponsored by the Department of Energy and the American Petroleum Institute (API).

How is it developed?

EPA instructors developed suitable training materials for the industry audience. Existing NPDES inspection and enforcement materials were modified for a one-day format.

The following topics were covered in the workshop:

- Overview of the Clean Water Act
- NPDES Regulatory Process
 - Permitting
 - Assessing Compliance
 - Enforcement Management System—How Enforcement Decisions are Made
 - Inspection Strategy and Purpose
- State Role in Implementing NPDES
- NPDES Enforcement
 - Types of Actions
 - Injunctive Relief
 - Penalty Policy
- Citizen Enforcement
- Spill Prevention, Control, and Countermeasure (SPCC) Plans
- EPA/Coast Guard Enforcement Jurisdiction
- Most Recent Oil and Gas Enforcement Cases (Lessons to be Learned)

How is it communicated?

API developed a brochure and advertised the workshop to industry. The workshop was held on September 23, 1998, in Houston, Texas.

Next steps

Comments received about the workshop indicated that it was valuable to most participants. Future workshops on NPDES permit compliance and enforcement issues may be planned.

ACTION PLAN 5:

MOCK NPDES INSPECTION

What is it?

A mock NPDES inspection is a compliance assistance activity. Its primary purpose is to provide the audience with a better understanding of how a regulator (inspector) determines a permittee's compliance with the NPDES permit. A mock inspection is an effective communication tool to educate the permittee and the inspectors about NPDES permit requirements. Usually, a mock inspection is done by an experienced inspector at a permitted site. The audience may include the facility's environmental managers, production managers, and government agency representatives from the Minerals Management Service (MMS), the Coast Guard, or the state environmental agency.

How is it developed?

One of the first steps in developing the mock inspection is to have an industry representative or trade association to sponsor the event. If industry sponsors the mock inspection and invites regulators to perform the mock inspection, a positive outreach/compliance assistance tone will be set. The appropriate atmosphere for this event should be non-adversarial, and should allow for open communication and educational opportunities for both sides.

Another reason for industry sponsorship of the event is that they can help locate a willing volunteer to have their facility/site be the recipient of a mock inspection. It is recommended that the selected site should be one that is more or less in compliance. However, if a violation is identified during the mock inspection, it could be used as an example to explain the regulator's enforcement options.

Logistically, it may be difficult to have several people out on an exploration or production rig to observe an inspection. Therefore, the mock inspection should be videotaped so that it can be replayed for others in a training session. Another problem relates to recording any communications during the mock inspection. The noise levels could mask the communications, so microphones should be used for transmitting/recording the dialogue between inspector and audience.

How is it communicated?

Industry should take the lead in sponsoring an NPDES training program and include the mock inspection video. The trainers could be an NPDES inspector and a permit writer. The mock inspection video could either be used in a training session to inform a permittee of permit requirements or to train inspectors.

Who will do it?

The mock inspection should be done by a state or EPA NPDES inspector who is knowledgeable about the industry, NPDES permit requirements, and inspections. The training session should be sponsored by the industry.

Next steps

- Industry representatives should assist in promoting this event—both the actual mock inspection and training sessions—and help locate a willing operation to be inspected.
- An EPA regional office should take the lead in organizing the mock inspection. The regional NPDES inspector should be the lead inspector, accompanied by state and/or MMS inspectors.
- EPA Headquarters Office of Compliance should help locate funds for videotaping the mock inspection.

ACTION PLAN 6:

INDUSTRY NPDES COMPLIANCE METRIC

What is it?

The industry compliance metric is a measure of NPDES compliance performance among offshore operators. The offshore oil and gas industry will use *Performance Measures For Safety and Environmental Management Systems at OCS Exploration and Production Operations*, developed by the Minerals Management Service for its compliance metric.

How is it developed?

MMS has worked with the oil and gas industry to promote voluntary adoption of its Safety and Environmental Management Program (SEMP). The offshore industry has developed guidance for SEM implementation, referred to as *Recommended Practices for Development of a Safety and Environmental Management Program for Outer Continental Shelf (OCS) Operations and Facilities* (RP 75). Industry participants will provide annual data to the MMS on NPDES compliance performance. MMS will combine the data and publish the results.

The purpose of these compliance metrics is as follows:

- To determine if OCS safety and environmental performance is improving after implementation of RP 75 at OCS operations.
- To provide the average and range for various quantitative measures against which companies can compare themselves.
- To provide MMS assurance that an operator's safety and environmental performance is improving.
- To provide background data upon which companies that have implemented RP 75 programs and have demonstrated good performance can base requests to MMS for specific regulatory relief.

One of the environmental performance measures being collected by MMS is the EPA NPDES Discharge Exceedance Rate. This metric is computed by dividing the number of reported NPDES DMR exceedances by the number of major platforms on the OCS plus the number of wells spudded during the year.

How is it communicated?

MMS will work with industry representatives to identify “pace-setter” companies for each performance measure. These companies will be requested to make presentations on how they achieved their performance at periodic workshops sponsored by MMS and industry.

Who will do it?

The Offshore Operators Committee is working with MMS to gather the data. MMS will publish the results and conduct the workshops.

APPENDICES

APPENDIX 1:

NPDES ECT WORKGROUP CONTACTS

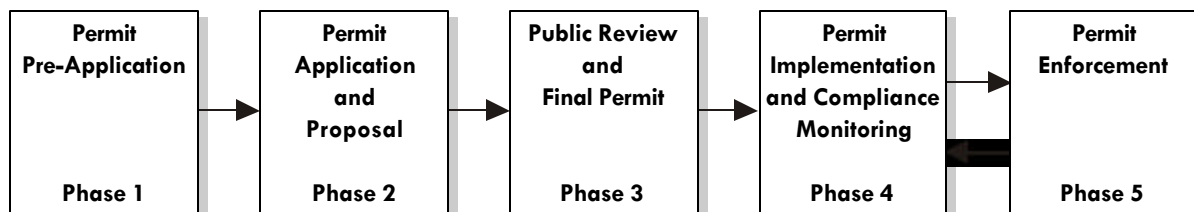
NAME	AFFILIATION	VOICE/ FAX	E-MAIL
David Lyons	EPA-HQ	202-564-7009 202-564-0050	lyons.david@epamail.epa.gov
Dan Chadwick	EPA-HQ	202-564-7054 202-564-0050	chadwick.dan@epamail.epa.gov
Larry Cole	EPA Region 4, Atlanta	404-562-9307 404-562-8692	cole.larry@epamail.epa.gov
Larry Henry	Chevron	504-592-6806 504-592-6764	lrhe@chevron.com
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Shelton Gray	California Regional Water Quality Control Board	209-445-5508 209-445-5910	grays@gwgate.swrcb.ca.gov
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Kent Satterlee	Shell Offshore, Inc.	504-588-4143 504-588-4567	ksatt@shellus.com
Nelson "Beau" Smith	EPA Region 6, Dallas	214-665-6466 214-665-2168	smith.nelson@epamail.epa.gov
Commander Edwin M. Stanton	U.S. Coast Guard, District 8	504-589-3656 504-589-4999	E.StantonD8M@internet.uscg.mil

NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) PROGRAM

The Clean Water Act (CWA), enacted by Congress in 1972, is primarily for the control of point-source discharges of waste into waters of the United States. All point-source discharges of waste are required by law to have National Pollutant Discharge Elimination System (NPDES) or state equivalent permits. Discharges of produced water, drilling mud, cooling water, spent acid water, glycol, amine, and caustic wash are examples of point-source discharges. Permits for point-source discharges require monitoring and reporting of discharge effluent conditions. Generally, the NPDES permit specifies technology-based limits for control of pollutant concentrations in the discharged effluent.

Under Section 311 of CWA, discharges of oil into surface waters must be reported to the Coast Guard National Response Center in Washington, D.C. If operators do not report oil spills, they are subject to fines and penalties. In 1973, the EPA promulgated the Oil Pollution Prevention Regulations (40 CFR Part 112) to mitigate the impacts of accidental spills on surface waters.

Hydrocarbon exploration, production, processing, and refining operations are affected by the Clean Water Act. The primary concern is contaminating streams with accidental oil and/or chemical spills. Therefore, a Spill Prevention Control and Countermeasure (SPCC) plan is required at onshore facilities where large quantities of oil and/or chemicals are stored. Facilities are required to prepare an SPCC plan if they have an oil storage capacity of: (1) 660 gallons in a single tank; (2) collectively, 1,320 gallons or more aboveground; and (3) collectively, 42,000 gallons or more underground.

MAJOR NPDES PERMIT PHASES

APPENDIX 3: NPDES CT WORKGROUP RESOURCES

Category/ Resource Description	Delivery Mechanism	Contact Name & Number	NPDES Phase
<i>Associations</i>			
OOC - Offshore Operators Committee	Workshops or Publications	Virgil Harris-504/592-6247	1,2,3,4,5
API - American Petroleum Institute	Workshops or Publications	Mark Rubin-202/682-8057	1,2,3,4,
TMOGA - Texas Mid-Continent Oil and Gas Association	Workshops or Publications		1,2,3,4,5
LIOGA - Louisiana Independent Oil and Gas Association	Workshops or Publications	Don Briggs	1,2,3,4,5
GCEAG- Gulf Coast Environmental Affairs Group	Workshops or Publications		1,2,3,4,5
NOIA - National Ocean Industries Association	Workshops or Publications	Bob Moran-202/347-6900	1,2,3,4,5
WSPA - Western States Petroleum Association	Workshops or Publications	Frank Holmes-805/966-7113	1,2,3,4,5
AOGA - Alaska Oil and Gas Association	Workshops or Publications	Alice Bullington-907/272-1481	1,2,3,4,5
Industry Associations - Annual/quarterly meetings to discuss regulatory issues.	Workshops or Publications		5
<i>Conference</i>			
Louisiana Mid-Continent Oil & Gas Association Annual Meeting	Speakers	Michael Lyons-504/387-3205	1,2,3,4,5
Annual Offshore Technology Conference	Speakers & Papers		1,2,3,4,5
MMS Annual Information Exchange Conference	Speakers & Papers		5
SPE/EPA Environmental Conference - The third SPE/EPA Exploration and Production Environmental Conference, held March 3-5, 1997, examined the ample evidence that proves economic progress and good environmental practices go hand in hand. More than 394 oil and gas professionals attended the conference. The 1997 theme, "Environmental Leadership Through Technology," accentuated the industry and government issues successfully by exploring essential partnerships that open and maintain vital communication channels leading to solutions to environmental concerns. The fourth SPE/EPA conference is scheduled for March 3-4, 1999, in Austin, Texas.	Speakers & Papers	SPE-800/456-6863	1,2,3,4,5,

Category/ Resource Description	Delivery Mechanism	Contact Name & Number	NPDES Phase
Metrics			
Industry and MMS are currently working on performance measures for the Safety and Environmental Management (SEMP) Plans which operators have developed. The performance measures include water discharge compliance measures.			4,5
Outreach			
API Publication - Achieving Common Sense Environmental Regulation: Oil and Gas Exploration & Production	Booklet Publication	Mark Rubin-202/682-8057	1
The Petroleum Refinery Team of the Energy and Transportation Branch (OC/EPA) has initiated a series of meetings between petroleum refineries and EPA and appropriate State government agencies to discuss environmental compliance issues. This outreach effort is multimedia in scope. Guidance may be developed to address regional issues. EPA Regions 5, 6 and 9 have held meetings with their refineries.		Tom Ripp-202/564-7003	1,2,3,4,5
General NPDES permit for brine discharges from onshore stripper oil wells in Pennsylvania. The package includes a fact sheet, the application, which includes instructions, and the permit.	Booklet Publication	Jim Erb-717/772-2199	1, 2, 3
An "Oil and Gas Wastewater Permitting Manual" for operators in Pennsylvania. Includes a discussion of NPDES issues.		Jim Erb-717/772-2199	1
Web Sites	World Wide Web		1,2,3,4,5
<ul style="list-style-type: none"> Environmental Protection Agency Louisiana Department of Environmental Quality American Petroleum Institute Louisiana Mid-Continent Oil and Gas Association 			

Category/ Resource Description	Delivery Mechanism	Contact Name & Number	NPDES Phase
<ul style="list-style-type: none"> Society of Petroleum Engineers Others 			
Mock Facility Inspection	In the field	Chae Park–206/553-1441	4,5
Public relations type materials, e.g., handouts written in plain English to explain permitting issues and industry practices. Especially useful with items listed below or at public hearings or meetings when developing the permit.			1,2,3
Scoping meeting with public, permittee, state and other government representatives before drafting permit to discuss issues/concerns they have with existing permit.	Meetings	Robert Ribichaud–206/553-1448	1,2,3
Record Keeping Refresher Tips (e.g., how to maintain monitoring data)	Handout or Meeting		4,5
Industrial sector, problem-solving sessions that include industry, workshops, government, and academia.	Meeting or Workshop		3,4,5
<i>Policy and Practice</i>			
EPA's Supplemental Environmental Projects Policy	Agency Memo		5
EPA's Policy on Self-Auditing and Disclosure	Agency Memo		5
EPA's Clean Water Act Settlement Penalty Policy	Agency Memo		5
Laminated signs and charts have been used successfully to provide on-the-job awareness and training for safety and environmental areas.			4

Category/ Resource Description	Delivery Mechanism	Contact Name & Number	NPDES Phase
EPA's Interim Guidance for Performance-Based Reduction of NPDES Permit Monitoring Frequencies	Agency Memo		1,2,3,4
<i>Reference</i>			
NPDES Permits - General permits published in the Federal Register. Also, regional permitting records, including permit fact sheets, public comments, response to comments.			2,3,4,5
Self Reporting Data - Discharge monitoring reports, as well as notices of violation, requests for coverage, and other correspondence are retained by the Regional Office.			5
Effluent Guidelines - Final guidelines published in the Federal Register, as well as development documents associated with the guidelines.			1,2
<i>Training</i>			
The Offshore Operators Committee conducted a two-day training program for federal and state regulators. The first day was at a land-based training facility involving some hands-on simulators, lecture, and demonstrations. The second day was an offshore field trip to a production platform and a drilling rig in the Gulf of Mexico.	Classroom, Exercises & Field Visit		4,5
Minerals Management Service (MMS) T-2 training programs, various media, e.g., classroom, hands-on, computer-based.	Classroom, Exercises, and CD-Interactive Program (CD-I)		4,5
Offshore Operators Committee conducted training workshops on API RP 75, "Recommended Practices for Development of a Safety and Environmental Management Program for Outer Continental Shelf (OCS) Operations and Facilities"	Workshop		4,5
IVD Environmental Training Series for Oil and Gas Operations (NPDES - Offshore and Onshore) - This video and workbook series			4,5

Category/ Resource Description	Delivery Mechanism	Contact Name & Number	NPDES Phase
covers objectives and expectations, pre- and post-testing, general discharge permits and parameters, and testing.			
HTG PILOT for Windows—Federally Mandated Training - This new multimedia series of 25 programs is industry-validated and can be easily delivered via networks or intranets. Program features include: three distinct learning paths, site-specific training requirements, message center to contact training coordinator, regulatory reference, random test generation, personalized notes, evaluation of further instructions needed, web technology uses. NPDES training module has not been developed since it is not a mandated training but could be developed through API and EPA sponsorship.			4,5
Shell Robert Training Center - Located in Robert Louisiana, the training center offers training in well control and drilling technology, production operations, and safety and environmental training. The training center features a well control simulator and operable production equipment.			1,2,3,4
Company specific training programs and videos. Shell has prepared several types of training materials for educating personnel in the best practices of permit compliance.			1,2,3,4
EPA's Permit Writers Course	Classroom Instructor	Dan Weese	1,2,3,4
NPDES Minimum Program Specific Training (Inspector Training) Manual		Dan Chadwick-202/564-7054	4,5
Inspector Training Modules (Advanced training or supplement to inspector training for NPDES Inspectors)		Dan Chadwick-202/564-7054	4,5
<ul style="list-style-type: none"> • Program Overview • Legal Issues • Sampling Procedures • Laboratory Analysis • Biomonitoring 			
Louisiana State University Agricultural Center Cooperative Extension Service			4,5

Category/ Resource Description	Delivery Mechanism	Contact Name & Number	NPDES Phase
Basic Wastewater Treatment Principles Course			
EPA Water Quality Workshops for Permitting Purposes	Classroom	Frances Desselle-202/260-1320	2,3
EPA Permitting Laws and Procedures	Classroom	Frances Desselle-202/260-1320	2,3,4,5
EPA Basic Stormwater Treatment Course	Classroom	Frances Desselle-202/260-1320	3,4,5
Local Workshops 1,2,3,4,5			
EPA TMDL Regional Exchange Workshop	Classroom	Frances Desselle-202/260-1320	2,3
EPA QUAL2EU Workshop	Classroom	Frances Desselle-202/260-1320	2,3
University of Texas Classroom Handouts			2,3,4,5
<ul style="list-style-type: none"> • Toxicity Reduction: Evaluation and Control • Health Risk Assessment for Environmental Decisions • Water Quality Analysis Simulation Program (WASP) • Biomonitoring for NPDES Permit Compliance • Advanced Water Pollution Control (Biological Wastewater Treatment) • Water Quality Modeling/Water Quality Modeling with WASP5 	Classroom		
University of Southern Louisiana Environmental Training Center	Classroom	318/482-6150	4,5
Water Environment Federation			
<ul style="list-style-type: none"> • Water Pollution Control Technology • Toxicity Issues in Water Pollution Control Conferences 		800/666-0206	2,3,4,5

Category/ Resource Description	Delivery Mechanism	Contact Name & Number	NPDES Phase
EPA's Whole Effluent Toxicity (WET) Training Program	Workshop	Dan Weese-202/260-6809	1,2,3,4,5
<i>Work Process</i>			
California OCS NPDES General Permit for E&P Discharges: EPA Region 9 is using a workshop process to gather data and resolve to the extent possible particularly contentious issues with all interested parties. By the time the process is complete, there will have been about 5 to 7 separate workshops related to specific areas of concern, e.g., modeling, bibliographical references, produced water/drilling fluid, best management practices, and bioaccumulation.	Workshop Meetings		1,2,3,4
Example Notebook: Profile of the Petroleum Refining Industry; EPA		Dan Chadwick-202/564-7054	1,2,3,4,5
Office of Compliance Sector Notebook Project			
EPA Office of Solid Waste and Emergency Response (OSWER) has been involved with the IOGCC in reviewing state exploration and production waste management practices. This resulted in guidelines for State Oil and Gas regulatory programs and a series of state reviews. These guidelines and subsequent reviews cover all aspects of E&P waste management except air emissions.		Dan Derkics-703/308-8409	1,2,3,4,5
Regional Permits and Enforcement Staff - Active in answering compliance questions from the regulated community, as well as from other state and federal entities, environmental organizations, and the general public.			1,2,3,4,5
MMS Inspections - Under a 1989 Memorandum of Agreement, MMS conducts a set number of NPDES inspections on offshore facilities in the western Gulf of Mexico on behalf of EPA Region 6.			5
Enforcement Actions - Administrative Orders, Administrative Penalty Orders, and Civil Referrals			5

APPENDIX 4:

INDUSTRY ASSOCIATION WEB PAGES AND LINKS TO EPA

ORGANIZATION	DESIGNATION	EPA LINK	INTERNET ADDRESS
American Gas Association	AGA	No	www.aga.com
American Petroleum Institute	API	Yes	www.api.org
Independent Petroleum Association of America	IPAA	No	www.ipaa.org
International Association of Drilling Contractors	IADC	No	www.iadc.org
Interstate Oil and Gas Compact Commission	IOGCC	Yes	www.iogcc.oklaosf.state.ok.us
Louisiana Independent Oil & Gas Association	LIOGA	No	www.lioga.com
Louisiana Mid-Continent Oil & Gas Association	LMOGA	Yes	www.lmoga.gov
Offshore Operators Committee	OOC	No	www.acadiacom.net/ooc
Society of Petroleum Engineers	SPE	Yes	www.spe.gov
Texas Independent Producers and Royalty Owners Association	TIPRO	No	www.tipro.org
Western States Petroleum Association	WSPA	No	www.wspa.org

EPA's EnviroSense Home Page:

<http://es.epa.gov> or

<http://www.epa.gov/envirosense/>

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